



UNITED STATES DEPARTMENT OF COMMERCE  
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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/401,229	03/09/95	TANG	W 50169/105/EN

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ESM1/0317

EXAMINER

LEE, J

ART UNIT	PAPER NUMBER
2501	17

DATE MAILED:

03/17/97

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined. ☒ Responsive to communication filed on December 9, 1996 ☒ This action is made final.
- A shortened statutory period for response to this action is set to expire THREE (3) month(s), ----- days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                   |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.  | 4. <input type="checkbox"/> Notice of informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____  |

Part II SUMMARY OF ACTION

1. ☒ Claim(s) 17 - 35 and 39 - 75 are pending in the application.  
Of the above, claim(s) \_\_\_\_\_ are withdrawn from consideration.
2. ☒ Claim(s) 1 - 16 and 36 - 38 have been canceled.
3. ☒ Claim(s) 17 - 35, 39 - 51, 53 - 58, 60, 66 - 72, and 75 are allowed.
4. ☒ Claim(s) 52, 59, 61 - 65, 73, and 74 are rejected.
5. ☐ Claim(s) \_\_\_\_\_ are objected to.
6. ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawing(s) under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawing(s) are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction(s), filed on \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under 35 USC 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☒ Other Applicant is required to copy claim 1 from U.S. Patent 5,433,651 for interference purposes.

EXAMINER'S ACTION

Applicant's communication filed on December 9, 1996, has been carefully considered by the Examiner. The amendments to the claims have obviated the previously applied rejection under 35 U.S.C. § 112, second paragraph, and that rejection is now withdrawn. The addition of a great many new claims has, however, introduced new problems of indefiniteness, and a new rejection under this section of the statute is set forth below. All of the claims in this application recite subject matter which is now deemed to be patentably distinct from the prior art of record.

The Information Disclosure Statement filed by applicant on January 9, 1997, has also been carefully considered by the Examiner. Although no rejections are made herein based on prior art cited in that Statement, one of the references therein (not previously of record in this application) discloses and claims subject matter that applicant appears to be able to make. A requirement to copy a claim is thus set forth below.

Claims 52, 59, 61-65, 73, and 74 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is believed that the dependency of claim 52 is stated incorrectly since there is no antecedent support for the term "polisher" (line 1). For examination purposes, it is believed that claim 52 should depend from claim 48 rather than claim 47. In claim 59, line 2, the word "uncouples" should actually be --decouples--. The present wording

makes the claim indefinite. Claims 61-65 are indefinite in that they are substantial duplicates of claims 48-52. Claims 73 and 74 are indefinite in that they are word-for-word identical to each other.

Claims 17-35, 39-51, 53-58, 60, 66-72, and 75 are allowable over the prior art of record for reasons previously developed during the prosecution of this application.

Claims 52, 59, 73, and 74 would also be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action.

It appears that applicant is able to make at least claim 1 of U.S. Patent 5,433,651 to Lustig et al (submitted by applicant in the Information Disclosure Statement of January 9, 1997). Applicant's Figure 6 (and discussion thereof on page 15 of the specification) appears to clearly provide basis for the subject matter of claim 1 of Lustig et al. Therefore,

The following claim number 1 from U.S. Patent No. 5,433,651 is suggested to applicant under 35 U.S.C. 135(a) for the purposes of an interference:

An in-situ chemical-mechanical polishing process  
monitor apparatus for monitoring a polishing process  
during polishing of a workpiece in a polishing machine,  
the polishing machine having a rotatable polishing  
table provided with a polishing slurry, said apparatus  
comprising:

- a) a window embedded within the polishing table, said window traversing a viewing path during polishing and further enabling in-situ viewing of a polishing surface of the workpiece from an underside of the polishing table during polishing as said window traverses a detection region along the viewing path;
- and
- b) means coupled to said window on the underside of the polishing table for measuring a reflectance, said reflectance measurement means providing a reflectance signal representative of an in-situ reflectance, wherein a prescribed change in the in-situ reflectance corresponds to a prescribed condition of the polishing process.

The suggested claim must be copied exactly, although other claims may be proposed under 37 CFR 1.605(a).

Applicant must copy the patent claim within THREE MONTHS from the date of this letter, as a part of a complete response to this Office action.

Failure to copy the claim will be taken as a concession that the subject matter of this claim is the prior invention of another under 35 U.S.C. 102(g) and thus also prior art under 35 U.S.C. 103(a). *In re Oguie*, 186 USPQ 227 (CCPA 1975).

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Art Unit 2501

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Examiner John D. Lee at telephone number (703) 308-4886.

  
JOHN D. LEE  
PRIMARY PATENT EXAMINER  
GROUP ART UNIT 251